SEQUENCE LISTING

<110>   MARGOLIN, JUDITH F.
         GINGRAS, MARIE-CLAUDE

<120>   TREM-1 SPLICE VARIANT FOR USE IN MODIFYING IMMUNE RESPONSES

<130>   P02046US1/10023489/OTA#01-07

<140>   TO BE ASSIGNED
<141>   2001-12-06

<150>   60/254,404
<151>   2000-12-07

<160>   28

<170>   PatentIn version 3.1

<210>   1
<211>   755
<212>   DNA
<213>   HUMAN

<400>   1
attgtggtgc cttgtagctg tcccgggagc cctcagcagc agttggagct ggtgcacagg   60

aaggatgagg aagaccaggc tctgggggct gctgtggatg ctctttgtct cagaactccg   120

agctgcaact aaattaactg aggaaaagta tgaactgaaa gaggggcaga ccctggatgt   180

gaaatgtgac tacacgctag agaagtttgc cagcagccag aaagcttggc agataataag   240

ggacggagag atgcccaaga ccctggcatg cacagagagg ccttcaaaga attcccatcc   300

agtccaagtg gggaggatca tactagaaga ctaccatgat catggtttac tgcgcgtccg   360

aatggtcaac cttcaagtgg aagattctgg actgtatcag tgtgtgatct accagcctcc   420

caaggagcct cacatgctgt tcgatcgcat ccgcttggtg gtgaccaagg ggttccggtg   480

ttcaacattg tcattctcct ggctggtgga ttcctgagta agagcctggt cttctctgtc   540

ctgtttgctg tcacgctgag gtcatttgta ccctaggccc acgaacccac gagaatgtcc   600

tctgacttcc agccacatcc atctggcagt tgtgccaagg gaggagggag gaggtaaaag   660

gcagggagtt aataacatga attaaatctg taatcaccag ctatttctaa agtcagcgtc   720

tcaccttaaa aaaaaaaaaa aaaaaaaaaa aaaaa   755

<210>   2
<211>   150
<212>   PRT
<213>   HUMAN

<400>   2

Met Arg Lys Thr Arg Leu Trp Gly Leu Leu Trp Met Leu Phe Val Ser
1   5   10   15

1

```
Glu Leu Arg Ala Ala Thr Lys Leu Thr Glu Glu Lys Tyr Glu Leu Lys
        20                  25                  30

Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe
        35                  40                  45

Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro
        50                  55                  60

Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val
65                  70                  75                  80

Gln Val Gly Arg Ile Ile Leu Glu Asp Tyr His Asp His Gly Leu Leu
                85                  90                  95

Arg Val Arg Met Val Asn Leu Gln Val Glu Asp Ser Gly Leu Tyr Gln
            100                 105                 110

Cys Val Ile Tyr Gln Pro Pro Lys Glu Pro His Met Leu Phe Asp Arg
        115                 120                 125

Ile Arg Leu Val Val Thr Lys Gly Phe Arg Cys Ser Thr Leu Ser Phe
    130                 135                 140

Ser Trp Leu Val Asp Ser
145                 150


<210>   3
<211>   1023
<212>   DNA
<213>   MUS MUSCULUS

<400>   3
ttcaagggaa aagcaagatc ttgcacaagg tcccctccgg ctggctgctg gcaaaggaaa      60

ggtgccatgg gacctctcca ccagtttctc ctgctgctga tcacagccct gtcccaagcc     120

ctcaacacca cggtgctgca gggcatggcc ggccagtcct tgagggtgtc atgtacttat     180

gacgccttga agcactgggg gagacgcaag gcctggtgtc ggcagctggg tgaggagggc     240

ccatgccagc gtgtggtgag cacacacggt gtgtgggctg ctggccttcc tgaagaagcg     300

gatgggagca cagtcatcgc agatgacacc cttgctggaa ccgtcaccat cactctgaag     360

aacctccaag ccggtgacgc gggcctctac cagtgtcaga gtctccgagg ccgagagcgt     420

gaggtcctgc agaaagtact ggtggaggtg ctggaggacc ctctagatga ccaagatgct     480

ggagatctct gggtccccga ggagtcatcg agtttcgagg gtgcccaagt ggaacacagc     540
```

2

```
acctccagga atcaagagac ctccttccca cccacctcca ttcttctcct cctggcctgc        600

gttctcctga gcaagtttct tgcagccagc atcctctggg ctgtggccag gggcaggcag        660

aagccgggaa cacctgtggt cagagggctg gactgtggcc aagatgctgg gcaccaactt        720

cagatcctca ctggacccgg aggtacgtga gagaattctg agtgggagga gaactacagc        780

ttaagtccag ccaggagtca atccagcctg catgctctcc cctcctccac caagacttct        840

gtttctgcta cttttgcttc agaggccgcc tctgccttca gccacctatc ctgggaacag        900

gaatactgtg tgtacatctg tggtgagttg ggaagaacac tggatgggtg tccgtaaaat        960

tctggaattt gggaattaac atcctcccac accagaaaat agaaaaaaaa gaaccatggg       1020

gcc                                                                      1023


<210>    4
<211>    995
<212>    DNA
<213>    MUS MUSCULUS

<400>    4
acttgccttg gggccattgg cagttagcac accaggaagg agcttcatac agaggaggca         60

gggacctggg ggatgtcacc gctgctgcta tggctggggc tgatgctctg tgtctcggga        120

ctccaagctg agatgagga agaacacaag tgttttctgg agggcgagaa cctgaccctg        180

acttgtcctt acaacatcat gctatactca ctgagcctga aggcctggca gcgggtcaga        240

agccacggtt ctccagagac tctggtgctc acaaacacca gaaaggcaga cttcaacgtg        300

gccagggctg ggaagtactt gctggaggat tatcccaccg aatctgtcgt caaggtcacg        360

gtgactgggc tgcagaggca agatgtgggg ctgtaccagt gtgtggtcta cctctctcct        420

gacaatgtta tcattctgcg tcaacggata cggctggcat ggtgtcaagg aagccagtg        480

atggtgatcg ttctgacgtg tggcttcata ctaaacaagg cctggtctt ctcagtcctg        540

tttgtctttc tctgcaaagc tgggcctaag gtgttacagc cttccaagac atccaaagta        600

cagggagtct ctgagaaaca gtagccttcc tgctacaagc tgtgagcaca ccttccctta        660

tctattaaca acataccaga tgttctgtat tggggacaat ctgggccttc ctacattctc        720

cttgtgaact ctagttagca catgatactc ccagaggaca gctctgagga gagctgtgta        780

gaaggaggct catgagacat cagtgaagaa tataaaattg agagagattt ggacctttgg        840

tggagcagtt aagcaggacc cacagagaat tcacctcaaa atcttatcac catttctctc        900

ctgctaacca ggtctgccat gctgtggact ggtaaaacct atatgatgta acctatctct        960

cttctgataa taataaaaaa aattgtattt ttttc                                   995
```

3

<210> 5
<211> 990
<212> DNA
<213> MUS MUSCULUS

<400> 5
gagcttgaag gatgaggaag gctgggctct ggggactgct gtgcgtgttc tttgtctcag   60

aagtcaaagc tgccattgtt ctagaggaag aaaggtatga cctagtggag ggccagactt   120

tgacagtgaa gtgtcccttc aacatcatga agtatgccaa cagccagaag gcttggcaga   180

gactaccaga cgggaaggaa cccttgaccc tggtggtcac acagaggccc tttacaagac   240

ccagtgaagt ccacatgggg aagttcaccc tgaaacatga ccctagtgag gccatgctac   300

aagttcaaat gactgacctt caagtgacag actctggatt gtatcgttgt gtgatttacc   360

atcctccgaa tgaccctgtt gtgctcttcc atcctgtccg cctggtggtg accaagggtt   420

cttcagatgt gttcactcct gtcatcattc ctattacaag gctgacagag cgtcccatcc   480

ttattaccac aaaatactca cccagtgaca caactacaac ccgatcccta cccaagccca   540

ctgcggttgt ttcctctcct ggtcttggag tcactatcat aaatgggaca gatgctgaca   600

gtgtctccac atccagtgtt actatttcag tcatctgtgg acttctcagc aagagcctgg   660

ttttcatcat cttattcatt gtcacaaaga ggacatttgg atgacagaac ttgaagctat   720

acaatagtga ccttcagcgg tgtctatttc acaggaggag ctgaggtggt ggggctgagg   780

aggagctatg acatgaattg aacctgtaat caccggtgac gtctaaggct caggatatcc   840

tcagctgacc ctgtccactc tcctcatttt atccatcatc ttggggatgt gctctgcacc   900

cttagaaaag gggaaaccat tcccagaaca ctctggccat tcccctaaa tagttgggtt   960

ggcctgaaat aaagagaaac tccagagctt   990

<210> 6
<211> 1041
<212> DNA
<213> MUS MUSCULUS

<400> 6
tgacatgcct gatcctctct tttctgcagt tcaagggaaa gacgagatct tgcacaaggc   60

actctgcttc tgcccttggc tggggaaggg tggcatggag cctctccggc tgctcatctt   120

actctttgtc acagagctgt ccggagccca caacaccaca gtgttccagg gcgtggcggg   180

ccagtccctg caggtgtctt gcccctatga ctccatgaag cactggggga ggcgcaaggc   240

ctggtgccgc cagctgggag agaagggccc atgccagcgt gtggtcagca cgcacaactt   300

gtggctgctg tccttcctga ggaggtggaa tgggagcaca gccatcacag acgataccct   360

gggtggcact ctcaccatta cgctgcggaa tctacaaccc catgatgcgg gtctctacca   420

```
gtgccagagc ctccatggca gtgaggctga caccctcagg aaggtcctgg tggaggtgct      480

ggcagacccc ctggatcacc gggatgctgg agatctctgg ttccccgggg agtctgagag      540

cttcgaggat gcccatgtgg agcacagcat ctccaggagc ctcttggaag agaaatccc       600

cttcccaccc acttccatcc ttctcctcct ggcctgcatc tttctcatca agattctagc      660

agccagcgcc ctctgggctg cagcctggca tggacagaag ccagggacac atccacccag      720

tgaactggac tgtggccatg acccagggta tcagctccaa actctgccag ggctgagaga      780

cacgtgaagg aagatgatgg gaggaaaagc ccaggagaag tcccaccagg accagccca       840

gcctgcatac ttgccacttg gccaccagga ctccttgttc tgctctggca agagactact      900

ctgcctgaac actgcttctc ctggaccctg gaagcaggga ctggttgagg gagtggggag      960

gtggtaagaa cacctgacaa cttctgaata ttggacattt taaacactta caaataaatc     1020

caagactgtc atatttaaaa a                                                1041


<210>   7
<211>   884
<212>   DNA
<213>   HUMAN

<400>   7
ctactactac taaattcgcg gccggtcgac gctggtgcac aggaaggatg aggaagacca       60

ggctctgggg gctgctgtgg atgctctttg tctcagaact ccgagctgca actaaattaa      120

ctgaggaaaa gtatgaactg aaagaggggc agaccctgga tgtgaaatgt gactacacgc      180

tagagaagtt tgccagcagc cagaaagctt ggcagataat aagggacgga gagatgccca      240

agaccctggc atgcacagag aggccttcaa agaattccca tccagtccaa gtggggagga      300

tcatactaga agactaccat gatcatggtt tactgcgcgt ccgaatggtc aaccttcaag      360

tggaagattc tggactgtat cagtgtgtga tctaccagcc tcccaaggag cctcacatgc      420

tgttcgatcg catccgcttg gtggtgacca agggtttttc agggacccct ggctccaatg      480

agaattctac ccagaatgtg tataagattc ctcctaccac cactaaggcc ttgtgcccac      540

tctataccag ccccagaact gtgacccaag ctccacccaa gtcaactgcc gatgtctcca      600

ctcctgactc tgaaatcaac cttacaaatg tgacagatat catcagggtt ccggtgttca      660

acattgtcat tctcctggct ggtggattcc tgagtaagag cctggtcttc tctgtcctgt      720

ttgctgtcac gctgaggtca tttgtaccct aggcccacga acccacgaga atgtcctctg      780

acttccagcc acatccatct ggcagttgtg ccaagggagg agggaggagg taaaaggcag      840

ggagttaata acatgaatta aatctgtaat caccagctat ttct                       884


<210>   8
```

<211> 948
<212> DNA
<213> HUMAN

<400> 8
```
attgtggtgc cttgtagctg tcccgggagc cctcagcagc agttggagct ggtgcacagg      60

aaggatgagg aagaccaggc tctgggggct gctgtggatg ctctttgtct cagaactccg     120

agctgcaact aaattaactg aggaaaagta tgaactgaaa gaggggcaga ccctggatgt     180

gaaatgtgac tacacgctag agaagtttgc cagcagccag aaagcttggc agataataag     240

ggacggagag atgcccaaga ccctggcatg cacagagagg ccttcaaaga attcccatcc     300

agtccaagtg gggaggatca tactagaaga ctaccatgat catggtttac tgcgcgtccg     360

aatggtcaac cttcaagtgg aagattctgg actgtatcag tgtgtgatct accagcctcc     420

caaggagcct cacatgctgt tcgatcgcat ccgcttggtg gtgaccaagg ttttttcagg     480

gacccctggc tccaatgaga attctaccca gaatgtgtat aagattcctc ctaccaccac     540

taaggccttg tgcccactct ataccagccc cagaactgtg acccaagctc cacccaagtc     600

aactgccgat gtctccactc ctgactctga aatcaacctt acaaatgtga cagatatcat     660

cagggttccg gtgttcaaca ttgtcattct cctggctggt ggattcctga gtaagagcct     720

ggtcttctct gtcctgtttg ctgtcacgct gaggtcattt gtaccctagg cccacgaacc     780

cacgagaatg tcctctgact tccagccaca tccatctggc agttgtgcca agggaggagg     840

gaggaggtaa aaggcaggga gttaataaca tgaattaaat ctgtaatcac cagctatttc     900

taaagtcagc gtctcacctt aaaaaaaaaa aaaaaaaaaa aaaaaaaa                   948
```

<210> 9
<211> 884
<212> DNA
<213> HUMAN

<400> 9
```
ctactactac taaattcgcg gccggtcgac gctggtgcac aggaaggatg aggaagacca      60

ggctctgggg gctgctgtgg atgctctttg tctcagaact ccgagctgca actaaattaa     120

ctgaggaaaa gtatgaactg aaagaggggc agaccctgga tgtgaaatgt gactacacgc     180

tagagaagtt tgccagcagc cagaaagctt ggcagataat aagggacgga gagatgccca     240

agaccctggc atgcacagag aggccttcaa agaattccca tccagtccaa gtggggagga     300

tcatactaga agactaccat gatcatggtt tactgcgcgt ccgaatggtc aaccttcaag     360

tggaagattc tggactgtat cagtgtgtga tctaccagcc tcccaaggag cctcacatgc     420

tgttcgatcg catccgcttg gtggtgacca agggtttttc agggacccct ggctccaatg     480

agaattctac ccagaatgtg tataagattc ctcctaccac cactaaggcc ttgtgcccac     540
```

```
tctataccag ccccagaact gtgacccaag ctccacccaa gtcaactgcc gatgtctcca      600

ctcctgactc tgaaatcaac cttacaaatg tgacagatat catcagggtt ccggtgttca      660

acattgtcat ctcctggct  ggtggattcc tgagtaagag cctggtcttc tctgtcctgt      720

ttgctgtcac gctgaggtca tttgtaccct aggcccacga acccacgaga atgtcctctg      780

acttccagcc acatccatct ggcagttgtg ccaagggagg agggaggagg taaaaggcag      840

ggagttaata acatgaatta aatctgtaat caccagctat ttct                      884
```

<210>   10
<211>   1023
<212>   DNA
<213>   HUMAN

<400>   10

```
ttcaagggaa aagcaagatc ttgcacaagg tcccctccgg ctggctgctg gcaaaggaaa       60

ggtgccatgg gacctctcca ccagtttctc ctgctgctga tcacagccct gtcccaagcc      120

ctcaacacca cggtgctgca gggcatggcc ggccagtcct tgagggtgtc atgtacttat      180

gacgccttga agcactgggg gagacgcaag gcctggtgtc ggcagctggg tgaggagggc      240

ccatgccagc gtgtggtgag cacacacggt gtgtgggctg ctggccttcc tgaagaagcg      300

gatgggagca cagtcatcgc agatgacacc cttgctggaa ccgtcaccat cactctgaag      360

aacctccaag ccggtgacgc gggcctctac cagtgtcaga gtctccgagg ccgagagcgt      420

gaggtcctgc agaaagtact ggtggaggtg ctggaggacc ctctagatga ccaagatgct      480

ggagatctct gggtccccga ggagtcatcg agtttcgagg gtgcccaagt ggaacacagc      540

acctccagga atcaagagac ctccttccca cccacctcca ttcttctcct cctggcctgc      600

gttctcctga gcaagtttct tgcagccagc atcctctggg ctgtggccag gggcaggcag      660

aagccgggaa cacctgtggt cagagggctg gactgtggcc aagatgctgg gcaccaactt      720

cagatcctca ctggacccgg aggtacgtga gagaattctg agtgggagga gaactacagc      780

ttaagtccag ccaggagtca atccagcctg catgctctcc cctcctccac caagacttct      840

gtttctgcta cttttgcttc agaggccgcc tctgccttca gccacctatc ctgggaacag      900

gaatactgtg tgtacatctg tggtgagttg ggaagaacac tggatgggtg tccgtaaaat      960

tctggaattt gggaattaac atcctcccac accagaaaat agaaaaaaaa gaaccatggg     1020

gcc                                                                   1023
```

<210>   11
<211>   1041
<212>   DNA
<213>   HUMAN
```

7

<400> 11
```
tgacatgcct gatcctctct tttctgcagt tcaagggaaa gacgagatct tgcacaaggc   60

actctgcttc tgcccttggc tggggaaggg tggcatggag cctctccggc tgctcatctt   120

actctttgtc acagagctgt ccggagccca caacaccaca gtgttccagg gcgtggcggg   180

ccagtccctg caggtgtctt gcccctatga ctccatgaag cactggggga ggcgcaaggc   240

ctggtgccgc agctgggag agaagggccc atgccagcgt gtggtcagca cgcacaactt   300

gtggctgctg tccttcctga ggaggtggaa tgggagcaca gccatcacag acgataccct   360

gggtggcact ctcaccatta cgctgcggaa tctacaaccc catgatgcgg gtctctacca   420

gtgccagagc ctccatggca gtgaggctga caccctcagg aaggtcctgg tggaggtgct   480

ggcagacccc ctggatcacc gggatgctgg agatctctgg ttccccgggg agtctgagag   540

cttcgaggat gcccatgtgg agcacagcat ctccaggagc ctcttggaag agaaatccc   600

cttcccaccc acttccatcc ttctcctcct ggcctgcatc tttctcatca agattctagc   660

agccagcgcc ctctgggctg cagcctggca tggacagaag ccagggacac atccacccag   720

tgaactggac tgtggccatg acccagggta tcagctccaa actctgccag ggctgagaga   780

cacgtgaagg aagatgatgg gaggaaaagc ccaggagaag tcccaccagg accagccca   840

gcctgcatac ttgccacttg gccaccagga ctccttgttc tgctctggca agagactact   900

ctgcctgaac actgcttctc ctggaccctg gaagcaggga ctggttgagg gagtggggag   960

gtggtaagaa cacctgacaa cttctgaata ttggacattt taaacactta caaataaatc   1020

caagactgtc atatttaaaa a   1041
```

<210>    12
<211>    995
<212>    DNA
<213>    MUS MUSCULUS

<400>    12
```
acttgccttg gggccattgg cagttagcac accaggaagg agcttcatac agaggaggca   60

gggacctggg ggatgtcacc gctgctgcta tggctggggc tgatgctctg tgtctcggga   120

ctccaagctg agatgagga agaacacaag tgttttctgg agggcgagaa cctgaccctg   180

acttgtcctt acaacatcat gctatactca ctgagcctga aggcctggca gcgggtcaga   240

agccacggtt ctccagagac tctggtgctc acaaacacca gaaaggcaga cttcaacgtg   300

gccagggctg ggaagtactt gctggaggat tatcccaccg aatctgtcgt caaggtcacg   360

gtgactgggc tgcagaggca agatgtgggg ctgtaccagt gtgtggtcta cctctctcct   420

gacaatgtta tcattctgcg tcaacggata cggctggcat ggtgtcaagg gaagccagtg   480
```

```
atggtgatcg ttctgacgtg tggcttcata ctaaacaagg gcctggtctt ctcagtcctg        540

tttgtctttc tctgcaaagc tgggcctaag gtgttacagc cttccaagac atccaaagta        600

cagggagtct ctgagaaaca gtagccttcc tgctacaagc tgtgagcaca ccttccctta        660

tctattaaca acataccaga tgttctgtat tggggacaat ctgggccttc ctacattctc        720

cttgtgaact ctagttagca catgatactc ccagaggaca gctctgagga gagctgtgta        780

gaaggaggct catgagacat cagtgaagaa tataaaattg agagagattt ggacctttgg        840

tggagcagtt aagcaggacc cacagagaat tcacctcaaa atcttatcac catttctctc        900

ctgctaacca ggtctgccat gctgtggact ggtaaaacct atatgatgta acctatctct        960

cttctgataa taataaaaaa aattgtattt ttttc                                    995
```

<210> 13
<211> 990
<212> DNA
<213> MUS MUSCULUS

<400> 13
```
gagcttgaag gatgaggaag gctgggctct ggggactgct gtgcgtgttc tttgtctcag         60

aagtcaaagc tgccattgtt ctagaggaag aaaggtatga cctagtggag ggccagactt        120

tgacagtgaa gtgtcccttc aacatcatga gtatgccaa cagccagaag gcttggcaga        180

gactaccaga cgggaaggaa cccttgaccc tggtggtcac acagaggccc tttacaagac        240

ccagtgaagt ccacatgggg aagttcaccc tgaaacatga ccctagtgag gccatgctac        300

aagttcaaat gactgacctt caagtgacag actctggatt gtatcgttgt gtgatttacc        360

atcctccgaa tgaccctgtt gtgctcttcc atcctgtccg cctggtggtg accaagggtt        420

cttcagatgt gttcactcct gtcatcattc ctattacaag gctgacagag cgtcccatcc        480

ttattaccac aaaatactca cccagtgaca caactacaac ccgatcccta cccaagccca        540

ctgcggttgt ttcctctcct ggtcttggag tcactatcat aaatgggaca gatgctgaca        600

gtgtctccac atccagtgtt actatttcag tcatctgtgg acttctcagc aagagcctgg        660

ttttcatcat cttattcatt gtcacaaaga ggacatttgg atgacagaac ttgaagctat        720

acaatagtga ccttcagcgg tgtctatttc acaggaggag ctgaggtggt ggggctgagg        780

aggagctatg acatgaattg aacctgtaat caccggtgac gtctaaggct caggatatcc        840

tcagctgacc ctgtccactc tcctcatttt atccatcatc ttggggatgt gctctgcacc        900

cttagaaaag gggaaaccat tcccagaaca ctctggccat tcccccctaaa tagttgggtt        960

ggcctgaaat aaagagaaac tccagagctt                                          990
```

<210> 14
```

9

```
<211>   22
<212>   DNA
<213>   HUMAN

<400>   14
ggacggagag atgcccaaga cc                                          22


<210>   15
<211>   22
<212>   DNA
<213>   HUMAN

<400>   15
accagccagg agaatgacaa tg                                          22


<210>   16
<211>   20
<212>   DNA
<213>   HUMAN

<400>   16
cagagaggcc ttcaaagaat                                             20


<210>   17
<211>   17
<212>   DNA
<213>   HUMAN

<400>   17
cctcccttgg cacaact                                                17


<210>   18
<211>   22
<212>   DNA
<213>   HUMAN

<400>   18
ttgtggagga tttgaagttg ag                                          22


<210>   19
<211>   22
<212>   DNA
<213>   HUMAN

<400>   19
cgtgagtcta agggttggat gg                                          22


<210>   20
<211>   20
<212>   DNA
<213>   HUMAN

<400>   20
atcccaccgg cccttacact                                             20
```

10

```
<210>   21
<211>   19
<212>   DNA
<213>   HUMAN

<400>   21
ggggagcggt ctggtctct                                                    19


<210>   22
<211>   20
<212>   DNA
<213>   HUMAN

<400>   22
ggagccctca gcagcagttg                                                   20


<210>   23
<211>   20
<212>   DNA
<213>   HUMAN

<400>   23
ttgggtggag cttgggtcac                                                   20


<210>   24
<211>   20
<212>   DNA
<213>   HUMAN

<400>   24
tttaaggtga gacgctgact                                                   20


<210>   25
<211>   19
<212>   DNA
<213>   HUMAN

<400>   25
cgaatggtca accttcaag                                                    19


<210>   26
<211>   20
<212>   DNA
<213>   HUMAN

<400>   26
ctggtataga gtgggcacaa                                                   20


<210>   27
<211>   22
<212>   DNA
<213>   HUMAN

<400>   27
```

11

aagctccacc caagtcaact gc

<210> 28
<211> 234
<212> PRT
<213> HUMAN

<400> 28

```
Met Arg Lys Thr Arg Leu Trp Gly Leu Leu Trp Met Leu Phe Val Ser
1               5                   10                  15

Glu Leu Arg Ala Ala Thr Lys Leu Thr Glu Glu Lys Tyr Glu Leu Lys
            20                  25                  30

Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe
            35                  40                  45

Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro
            50                  55                  60

Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val
65                  70                  75                  80

Gln Val Gly Arg Ile Ile Leu Glu Asp Tyr His Asp His Gly Leu Leu
                85                  90                  95

Arg Val Arg Met Val Asn Leu Gln Val Glu Asp Ser Gly Leu Tyr Gln
            100                 105                 110

Cys Val Ile Tyr Gln Pro Pro Lys Glu Pro His Met Leu Phe Asp Arg
            115                 120                 125

Ile Arg Leu Val Val Thr Lys Gly Phe Ser Gly Thr Pro Gly Ser Asn
    130                 135                 140

Glu Asn Ser Thr Gln Asn Val Tyr Lys Ile Pro Pro Thr Thr Thr Lys
145                 150                 155                 160

Ala Leu Cys Pro Leu Tyr Thr Ser Pro Arg Thr Val Thr Gln Ala Pro
                165                 170                 175

Pro Lys Ser Thr Ala Asp Val Ser Thr Pro Asp Ser Glu Ile Asn Leu
            180                 185                 190

Thr Asn Val Thr Asp Ile Ile Arg Val Pro Val Phe Asn Ile Val Ile
            195                 200                 205
```

12

Leu Leu Ala Gly Gly Phe Leu Ser Lys Ser Leu Val Phe Ser Val Leu
    210   215   220

Phe Ala Val Thr Leu Arg Ser Phe Val Pro
225   230